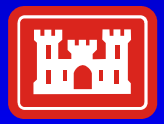
Information Hubs and Sensor Networks

EQ/I Workshop

Champaign, Illinois

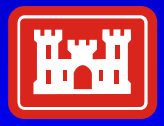
March 16-17, 2004



What's the Difference?

- HSOC
  - Connected to the deployed unit, wherever deployed. Critical part of an Army mission activity. An asset of the mission activity.

- Information Hub
  - Connected to the physical installation, landscape and region. An installation asset.

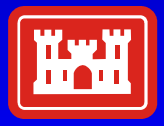


Information Hubs and Sensor Nets

- What are the primary functions:
  - Coordination (across installation, between installation and communities, between installations)
  - Situational awareness (what's going on, in real time, trends over time, events and trends across the installation and the region)
  - Diagnosis (integration of inputs, analysis of inputs, thresholds for response)
  - Response (analysis output, delivery of information assets in multi-media forms, decision making resources)

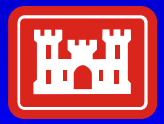
Delivery of Information

- Event Coordinators
  - Force deployments
  - Combat preparation events
  - Home Station Operations Center(s) requirements
  - Homeland Security Threat Events
- Operational Mission Coordinators
  - Safety, Public Affairs, Range Operators, Engineering, Environment, Logistics, Military Units



What's Different?

	Current	Future
Information and Databases	**Numerous stovepiped databases**	**Integrated, inter-related, interacting data**
Installation Community Exchanges	**Patchwork of linkages through privitization, service agreements, etc**	**Interactive framework of shared information and decision tools**
Installation Awareness	**Numerous sensors for multiple purposes**	**Fully integrated sensors and integrated response hub & nodes**



Camp Lejeune Integrated Operations Network (CLION)

Overview

Feb 2004

US Army Corps of Engineers

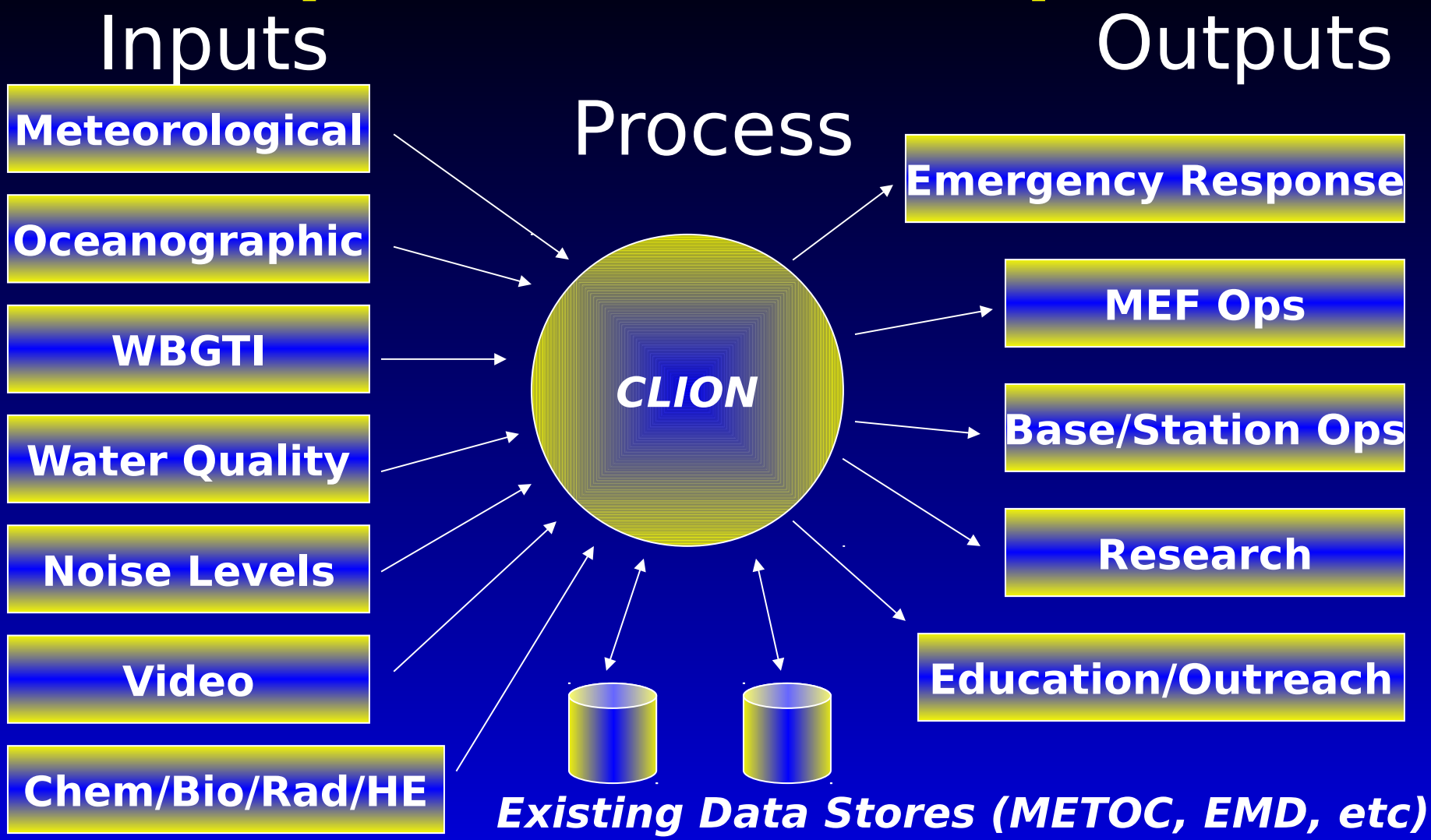
Engineer Research and Development Center

Camp Lejeune, NC

CLION Vision/Objectives

- **Vision**
  - **Envisioned as a integrated & automated network of operational meteorological, oceanographic, acoustic/seismic, and security sensors located throughout the greater Camp Lejeune area**
  - **Network designed to automatically collect, process, archive, and disseminate information that supports/enhances training & readiness, safety, security, and environmental management**
- **Objectives**
  - **Enhance Military Training and Operations (amphibious, special operations, air, ground, etc.)**
  - **Improve Personnel, Property, and Safety/Security (Anti-terrorism (CBRNE), heat stress warnings, lightning detection and tracking, search and rescue support, disaster warning and recovery, etc.)**
  - **Provide Explosive Noise Predictions and assessments (community health and welfare)**
  - **Support Environmental Management (water quality monitoring, invasive and endangered species, flood predictions, beach erosion, etc.)**

Inputs-Process-Outputs



CLION Sensor Groups